

RECEIVED
CENTRAL FAX CENTER

SEP 04 2008

Serial no. 10/784,049 - Lima et. al.

IN THE CLAIMS

Amend claims 1, 4, 5, and 8, cancel claim 3, and add new claims 22-24 as follows:

1. (currently amended) A method for producing activated carbon from poultry manure comprising:

a) grinding poultry manure prior to said carbonizing to provide a mixture of substantially uniform sized particles;

a b) carbonizing said poultry manure which has been ground to produce carbonized manure, and

b g) activating said carbonized manure under conditions effective to produce activated carbon having a BET surface area greater than about 200 m²/g.

2. (previously presented) The method of claim 1 wherein said poultry manure is selected from the group consisting of poultry cake and poultry litter.

3. (cancelled).

4. (currently amended) The method of claim 3 1 wherein said poultry manure is ground to about 20 mesh.

Serial no: 10/784,049 - Lima et. al.

5. (currently amended) The method of claim ~~3~~ 1 further comprising pelletizing said mixture of substantially uniform sized particles to provide pelleted manure.

6. (previously presented) The method of claim 5 wherein said pelleted manure is between approximately 3/16 inch and approximately 3/8 inch in diameter.

7. (previously presented) The method of claim 1 wherein said carbonizing comprises heating said poultry manure for a period of time and under conditions effective to carbonize said manure.

8. (currently amended) The method of claim ~~3~~ 1 wherein said poultry manure is carbonized in a substantially oxygen-free environment.

9. (previously presented) The method of claim 1 wherein said activating comprises contacting said carbonized manure with steam.

10. (previously presented) The method of claim 9 wherein said activating comprises contacting said carbonized manure with

Serial no. 10/784,049 - Lima et. al.

steam at a flow rate of between about 0.1 to about 5.0 ml/kg·min, at a temperature between about 700 to about 900°C, for about 15 to about 75 minutes.

11. (previously presented) The method of claim 10 wherein said stream flow rate is between about 1.0 to about 5.0 ml/kg·min.

12. (previously presented) The method of claim 1 further comprising washing said activated carbon with mineral acid to remove ash therefrom, and rinsing the washed activated carbon with water.

13. (original) The method of claim 1 wherein said conditions for activating said carbonized manure are effective to produce activated carbon having a BET surface area greater than about 300 m²/g.

14. (original) The method of claim 1 wherein said activated carbon further comprises a phosphate ion content greater than 4.0% by weight.

Serial no. 10/784,049 - Lima et. al.

15. (previously presented) Activated carbon produced by the method of claim 1.

16. (previously presented) Activated carbon produced by the method of claim 2.

17. (previously presented) Activated carbon produced by the method of claim 5.

18. (previously presented) Activated carbon produced by the method of claim 10.

19. (previously presented) Activated carbon produced by the method of claim 12.

20. (previously presented) Activated carbon produced by the method of claim 13.

21. (previously presented) Activated carbon produced by the method of claim 14.

22. (new) A process for treatment of fluids to remove heavy metals therefrom comprising contacting a fluid suspected of heavy

Serial no. 10/784,049 - Lima et. al.

metal contamination with the activated carbon produced by the method of claim 1 effective to adsorb said heavy metals thereon.

23. (new) The process of claim 22 wherein said heavy metals comprise Cu(II), Pb(II), Zn(II), Cd(II), Ni(II), Cr(III), Hg(II), Fe(II), Fe(III), Al(III), Co(II), Sn(II), Sn(IV), Ca(II) or Mg(II).

24. (new) The process of claim 22 wherein said heavy metals comprise Cu(II), Zn(II), Cd(II), Cr(III) or Ni(II).